

## Chapter 1 Problem 16 <sup>†</sup>

### Given

$$m = 14 \text{ Eg}$$

### Solution

Find the mass of the water in kilograms.

First write out the mass in grams and then convert to kilograms.

$$m = 14 \text{ Eg} = (14 \times 10^{18} \text{ g}) \left( \frac{1 \text{ kg}}{1000 \text{ g}} \right) = 1.4 \times 10^{16} \text{ kg}$$

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<sup>†</sup>Problem from Essential University Physics, Wolfson